

## PROPOSED

[Issuance Date]

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUEST**

03-XXE CAB  
File No. 0386-02/03  
04/05/06

Mr. Ronald Jacintho  
Manager  
Pohakulepo Recycling, LLC  
P. O. Box 262  
Puunene, Maui, Hawaii 96784

Dear Mr. Jacintho:

**Subject: Covered Source Permit (CSP) No. 0386-02-C  
Renewal Application No. 0386-06  
Pohakulepo Recycling, LLC  
800 TPH Rock Crushing Plant  
Located at: UTM - 758,540 Meters East and 2,304,000 Meters North,  
Wailuku, Maui  
Date of Expiration: [Five Year Period from Issuance Date]**

The subject covered source permit is issued in accordance with Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The issuance of this permit is based on the plans, specifications, and information that you submitted as part of your application received on September 27, 2002. This permit supercedes CSP No. 0386-02-C, issued on September 22, 2000, under application No. 0386-05, in its entirety.

The covered source permit is issued subject to the conditions and requirements set forth in the following attachments:

Attachment I: Standard Conditions  
Attachment II: Special Conditions  
Attachment III: Annual Fee Requirements  
Attachment IV: Annual Emissions Reporting Requirements

The forms for submission are as follows:

Attachment V: Compliance Certification  
Annual Emissions Report Form: Rock Crushing Plant Production  
Monitoring Report Form: Operation Hours and Production  
- Primary Jaw Crushers  
Monitoring Report Form: Visible Emissions

## PROPOSED

Mr. Ronald Jacintho  
[Issuance Date]  
Page 2

The following are for use in visible emissions monitoring:

- a. Visible Emissions Form Requirements State of Hawaii
- b. Visible Emissions Form State of Hawaii; and
- c. The Ringelmann Chart

This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment; and (c) in no manner implies or suggests that the Department of Health, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF  
Environmental Management Division

MM:lk

Enclosures

c: Blake Shiigi, EHS - Maui  
CAB Enforcement Section

## PROPOSED

### ATTACHMENT I: STANDARD CONDITIONS COVERED SOURCE PERMIT NO. 0386-02-C

[Issuance Date]

[Expiration Date]

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.  
  
(Auth.: HAR §11-60.1-90)
2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be wilfully defaced, altered, forged, counterfeited, or falsified.  
  
(Auth.: HAR §11-60.1-6; SIP §11-60-11)<sup>2</sup>
3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department of Health, except as provided in HAR, Section 11-60.1-91.  
  
(Auth.: HAR §11-60.1-7; SIP §11-60-9)<sup>2</sup>
4. A request for transfer from person to person shall be made on forms furnished by the Department of Health.  
  
(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the Regional Administrator for the U.S. Environmental Protection Agency (EPA).  
  
(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.

(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1 and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

(Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

(Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health in writing of the following dates:

- a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;
- b. The **actual date of construction commencement** within fifteen (15) days after such date; and
- c. The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department of Health to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department of Health copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department of Health but also directly to the U.S. EPA Administrator along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department of Health in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
- d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
- e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)<sup>2</sup>

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit,** the permittee shall immediately notify the Department of Health of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:
- Identification of each affected emission point and each emission limit exceeded;
  - Magnitude of each excess emission;
  - Time and duration of each excess emission;
  - Identity of the process or control equipment causing each excess emission;
  - Cause and nature of each excess emission;
  - Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
  - Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
  - A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)<sup>2</sup>

18. A copy of applicable correspondence or records submitted to the Department of Health shall be provided to the U.S. EPA Administrator.

(Auth.: HAR §11-60.1-90)

19. The permittee may request confidential treatment of any records in accordance with HAR Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

20. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

- a. Construction shall be commenced within eighteen (18) months after the permit takes effect, shall not be discontinued for a period of eighteen (18) months or more, and shall be completed within a reasonable time.
- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The Department of Health may extend the time periods specified in Standard Condition No. 20 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department of Health.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

22. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

23. All certifications shall be in accordance with HAR, Section 11-60.1-4.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

24. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
- b. To sample or monitor at reasonable times substances or parameters to assure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

25. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of the facility covered by this permit**, the discontinuance shall be reported in writing to the Department of Health by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)<sup>2</sup>

26. Each permit renewal application shall be submitted to the Department of Health no fewer than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Department of Health may allow a permit renewal application to be submitted no fewer than six (6) months prior to the permit expiration date, if the Department of Health determines that there is reasonable justification.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5 (a)(1)(iii))<sup>1</sup>

27. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

28. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR, Section 11-60.1-86, the compliance certification shall be submitted to the Department of Health and the U.S. EPA Regional Administrator once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

29. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

Clean Air Branch  
Environmental Management Division  
State of Hawaii Department of Health  
P.O. Box 3378  
Honolulu, HI 96801-3378



**CSP No. 0386-02-C  
Attachment I  
Page 7 of 7  
[Issuance Date]  
[Expiration Date]**

**PROPOSED**

**Upon request, all correspondence to the State of Hawaii Department of Health associated with this Covered Source Permit shall have duplicate copies forwarded to:**

**Chief  
Permits Office, (Attention: Air-3)  
Air Division  
U.S. Environmental Protection Agency  
Region 9  
75 Hawthorne Street  
San Francisco, CA 94105**

(Auth.: HAR §11-60.1-4, §11-60.1-90)

---

<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

## PROPOSED

### ATTACHMENT II: SPECIAL CONDITIONS COVERED SOURCE PERMIT NO. 0386-02-C

[Issuance Date]

[Expiration Date]

In addition to the standard conditions of the covered source permit, the following special conditions shall apply to the permitted facility:

#### **Section A. Equipment Description**

1. The rock crushing plant consists of the following:
  - a. 800 TPH stationary rock crushing plant with the following equipment and associated appurtenances:
    - i. 800 TPH Cedarapids primary jaw crusher (30" x 42"), serial no. 47420;
    - ii. 395 TPH Symons secondary cone crusher (4-1/4' diameter ), serial no. BPH18566;
    - iii. 400 TPH Impact Service Corporation tertiary crusher, model no. 77 VSI, serial no. 77-175 (41" table diameter);
    - iv. Eljay triple deck screen (5' x 16'), serial no. 48203;
    - v. Eljay triple deck screen (6' x 16'), serial no. 32D1591;
    - vi. Hewitt-Robbins scalping screen (5' x 12'), serial no. C70576602;
    - vii. Cedarapids vibrating grizzly feeder (42" x 17"), serial no. 47421;
    - viii. Various conveyors;
    - ix. Various enclosures; and
    - x. Water spray system.
  - b. The replacement crusher is listed as follows:
    - i. 323 TPH Minyu primary jaw crusher (30" x 42").

(Auth.: HAR 11-60.1-3)

2. An identification tag or name plate shall be attached to the crushers, feeder, and screens above to show model no. and/or serial no. and manufacturer. The identification tag or name plate shall be permanently attached to the equipment at a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

#### **Section B. Applicable Federal Regulations**

1. The rock crushing plant and 323 TPH Minyu primary jaw crusher are subject to the provisions of the following federal regulations:
  - a. 40 CFR, Part 60 Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and

- b. 40 CFR, Part 60 Standards of Performance for New Stationary Sources, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR Part 60, §60.670)<sup>1</sup>

2. The permittee shall comply with all applicable provisions of these standards, including all emission limits and all notification, testing, monitoring, and reporting requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR Part 60,)<sup>1</sup>

### **Section C. Operational Limitations**

#### **1. Hourly Limit**

The total operating hours of the rock crushing plant, as represented by the total combined operating hours of the Cedarapids and Minyu primary jaw crushers, shall not exceed 2,080 hours in any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

#### **2. Primary Crusher Production**

- a. The average capacity of the primary crushers shall not exceed 260 TPH based on the hours of operation, closed stroke opening, and the total combined yearly production.
- b. The total combined production of crushed aggregate from the Cedarapids and Minyu primary jaw crushers shall not exceed 540,800 tons in any twelve (12) month rolling period.
- c. The production of crushed aggregate shall be determined from the number of hours of operation and the maximum specified capacity of the primary crusher at the closed stroke opening.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

#### **3. Alternate Operating Scenario**

The permittee may temporarily replace the Cedarapids primary jaw crusher with the Minyu primary jaw crusher if the replacement is reasonably warranted (e.g., repair work to the Cedarapids primary jaw crusher) and the following provisions are adhered to:

- a. A written request is submitted in accordance with Attachment II, Special Condition No. E.7.a and approved by the Department of Health prior replacing the Cedarapids jaw crusher with the Minyu jaw crusher;
- b. The temporary replacement Minyu jaw crusher complies with all applicable conditions including all air pollution control equipment requirements, operating restrictions, and emission limits; and
- c. Written notification for returning the Cedarapids jaw crusher to service is submitted to the Department of Health in accordance with Attachment II, Special Condition E.7.b.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

**4. Jaw Crusher Operation**

Only one primary jaw crusher shall be operated at any one time. In no event shall both the Cedarapids and Minyu jaw crushers be operated simultaneously.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**5. Plant Configuration**

The permittee shall not operate the portable rock crushing plant in a configuration that would increase the number of emission points or cause an increase in the capacity of the process flow. The plant shall be configured to the layout identified in application for minor modification 0386-05.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**6. Fugitive Emission Limitations**

- a. The permittee shall not cause to be discharged into the atmosphere from any crusher, fugitive emissions which exhibit greater than fifteen percent (15%) opacity.
- b. The permittee shall not cause to be discharged into the atmosphere from any transfer point on the belt conveyors or from any other affected facility, fugitive emissions which exhibit greater than ten percent (10%) opacity.
- c. The permittee shall not cause or permit fugitive dust to become airborne without taking reasonable precautions and shall not cause the discharge of visible emissions of fugitive dust beyond the lot line of the property boundary on which the emissions originate.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90, §11-60.1-161; 40 CFR §60.672)

**7. Air Pollution Controls**

- a. Measures shall be taken by the permittee to control fugitive dust at material transfer points, stockpiles, and throughout the work yard. The following measures shall be used by the permittee to control fugitive dust:
  - i. A water truck shall be maintained and utilized on the grounds of the facility;
  - ii. Water spray heads shall be installed, operated, and maintain at the primary crusher and ends of conveyors that discharge aggregate into stockpiles;
  - iii. A water hose shall be used, as necessary, at the feed hopper to crusher; and
  - iv. The permittee shall install and maintain enclosures at:
    - a. Discharge end of 5' x 16' triple deck screen for conveyor transfer to stockpile;
    - b. Discharge end of 5' x 16' triple deck screen for conveyor transfer to tertiary crusher;
    - c. Discharge end of primary crusher for conveyor transfer to scalping screen;
    - d. Conveyor discharge to scalping screen;
    - e. Scalping screen for screening crushed aggregate;
    - f. Discharge end of scalping screen for conveyor transfer to stockpile;
    - g. Discharge end of scalping screen for conveyor transfer to secondary crusher; and
    - h. Discharge end of tertiary crusher for conveyor transfer to 6' x 16' triple deck screen.
- b. The enclosures and water spray system shall be properly maintained and kept in good operating condition at all times. The water spray system shall be used, as necessary and in conjunction with the enclosures, to control fugitive emissions to the requirements specified in Attachment II, Special Condition No. C.6. The Department of Health may at any time require the permittee to further abate fugitive dust emissions if an inspection indicates poor or insufficient control.
- c. The rock crushing plant shall not operate if observation or routine inspection of the wet suppression equipment required by Attachment II, Special Condition No. D.4, shows a significant drop in water flow rate, plugged nozzle(s), leak in the piping system, or other problem which affects its efficiency. The permittee shall investigate and correct the problem before resuming operations. The normal operating water flow rate for the water spray system shall be established in the performance test conducted pursuant to Attachment II, Section F. After review of the source test results, the Department of Health may set a requirement for minimum water flow rate.

(Auth.: HAR §11-60.1-3, §11-60.1-33, §11-60.1-90)

**Section D. Monitoring and Recordkeeping**

**1. Records**

All records, including support information, shall be maintained for at least five (5) years from the date of the monitoring sample, measurement, test, report, or application. Support information includes maintenance, inspection, and repair records of the subject equipment. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representative upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

**2. Hours of Operation**

The permittee shall operate and maintain a non-resetting hour meter at the motor control trailer for the Cedarapids and Minyu primary jaw crushers of the rock crushing plant for the continuous and permanent recording of the number of hours operated for the purpose of the hour limitation specified in Attachment II, Special Condition No. C.1.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**3. Production**

- a. The permittee shall collect and maintain weight receipts/tickets for crushed aggregate to record the total tons of material processed by the plant on a monthly and annual basis for purposes of annual emissions reporting.
- b. The permittee shall maintain daily records identifying the specific primary crusher in operation (by serial number), the maximum closed stroke opening, and total hours of operation to determine the total combined tons of material processed by the primary crushers on a monthly and annual basis for purposes of the production limitation specified in Attachment II, Special Condition No. C.2.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**4. Water Spray System**

- a. A non-resetting water flow meter shall be installed, operated, and maintained for the water spray system of the rock crushing plant to determine the cumulative gallons of water used for fugitive dust control and gallon per minute flow rate for the water spray system servicing equipment.

- b. The water pump, piping system, spray nozzles, and water flow meter shall be checked routinely, or at least once per month, to ensure proper operation of the water spray system.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

5. Performance Test

Annual performance testing shall be conducted pursuant to Attachment II, Special Condition, Section F. Test summaries and results shall be maintained in accordance with the requirements of Section F.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

6. Visible Emissions (V.E.)

- a. Except in those months where a performance test is conducted pursuant to Attachment II, Special Condition, Section F, the permittee shall conduct **monthly** (*calendar month*) V.E. observations for the crushing, screening operations, and conveyor transfer points in accordance with Method 9 or by use of a Ringelmann Chart as provided. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each emission point subject to opacity limits. For visible emissions observations, the observer shall comply with the following additional requirements:
  - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet) but not more than 402 meters (0.25 miles);
  - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources. The required observer position relative to the sun (Method 9, Section 2.1) shall be followed; and
  - iii. The observer shall record the operating capacity (tons/hr) of the primary crusher at the time the observations were made.
- b. The Department of Health may allow observation of a portion of the total emission points at the rock crushing plant, if it can be demonstrated that operations have been in compliance with the permit. As a minimum, at least three emission points of the rock crushing plant shall be observed each month. The selection of points shall include the primary crusher, 6' x 16' triple deck screen, and one transfer point without enclosure, or those points as specified by the Department of Health. Allowance to observe a portion of the total required emission points shall be obtained in writing from the Department of Health.

- c. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

7. Inspection, Maintenance, and Repair Log

An inspection, maintenance, and repair log shall be maintained for the equipment covered under this permit. Replacement of parts and repairs to the rock crushing plant, including the enclosures and water spray system, shall be documented. At a minimum, the following records shall be maintained:

- a. The date of the inspection/repair work;
- b. A description of the findings or any maintenance or repair work performed;
- c. The name and title of personnel performing the inspection/work; and
- d. Part(s) inspected or repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

8. Monitoring Summary

The permittee shall maintain records on the following:

- a. Total tons of aggregate processed on a monthly and yearly basis by the rock crushing plant;
- b. The number of hours the Cedarapids and/or Minyu primary jaw crusher operated on a monthly and 12-month rolling basis. Monthly records shall include:
  - i. Date of meter reading for the Cedarapids and/or Minyu primary jaw crusher;
  - ii. Beginning meter readings for the Cedarapids and/or Minyu primary jaw crusher each month;
  - iii. Total operating hours for the Cedarapids and/or Minyu primary jaw crusher for each month;
  - iv. Total combined operating hours for the Cedarapids and/or Minyu primary jaw crusher on a 12-month rolling basis; and
  - v. The size (inches) of the closed stroke opening and dates when changes were made to the closed stroke opening of the Cedarapids and/or Minyu primary jaw crushers.
- c. Dates when the Cedarapids and Minyu primary jaw crushers are interchanged. The permittee shall contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility the date and scenario under which it is operating and submit written requests and notifications in accordance with Attachment II, Section C.3.;



- d. Equipment inspection, maintenance, and repair work;
- e. Annual source performance test plans, summaries, and results for the plant; and
- f. Monthly V.E. observation monitoring results of the rock crushing plant.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

#### **Section E. Notification and Reporting Requirements**

##### **1. Standard Condition Reporting**

Notification and reporting pertaining to the following events shall be done in accordance with Attachment I, Standard Condition Nos. 16, 17 and 25, respectively:

- a. *Intent to shut down air pollution control equipment for necessary scheduled maintenance;*
- b. *Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and*
- c. *Permanent discontinuance of construction, modification, relocation, or operation of the facility covered by this permit.*

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90; SIP §11-60-10, §11-60-16)<sup>2</sup>

##### **2. Deviations**

The permittee shall report in writing **within five (5) working days any deviations** from the permit requirements, including those attributed to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional performance testing, more frequent monitoring, or the implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

##### **3. Performance Testing**

- a. At least **thirty (30) days prior** to conducting a performance test pursuant to this Attachment, Section F, the permittee shall submit to the Department of Health a test plan indicating the date(s) of the scheduled performance test for the rock crushing plant and the locations of the visible emission readings.

- b. Written reports of the results of all performance tests conducted to demonstrate compliance shall be submitted to the Department of Health within **sixty (60)** days after the completion of the performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.676)<sup>1</sup>

#### 4. Monitoring Reports

The permittee shall submit **semi-annually** the following reports to the Department of Health. The reports shall be submitted **within sixty (60) days after** the end of each semi-annual calendar period (January 1 - June 30 and July 1 - December 31) and shall include:

- a. The total operating hours of the rock crushing plant on a monthly and twelve-month 12-month rolling basis.
- b. The closed stroke opening of the Minyu and/or Cedarapids primary jaw crushers.
- c. Identify any opacity exceedances as determined by visible emissions monitoring of the rock crushing plant. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that there were no exceedances for that semi-annual period for jaw crushing, screening operations, and conveyor transfer points.

The enclosed **Monitoring Report Form: Operating Hours and Production - Primary Jaw Crushers** and **Monitoring Report Form: Visible Emissions**, shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

#### 5. Annual Emissions

As required by Attachment IV, and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall report **annually** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following** the end of each calendar year. Upon written request of the permittee, the deadline for reporting of annual emissions may be extended, if the Department of Health determines that reasonable justification exists for the extension. For the rock crushing operations, the enclosed **Annual Emissions Report Form: Rock Crushing Plant Production**, shall be used.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, **Attachment V: Compliance Certification** pursuant to HAR, Subsection 11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification, including the requirements of Section 114 (a) (3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504 (b) of the Clean Air Act;
- f. Any additional information as required by the Department of Health, including information to determine compliance;
- g. The compliance certification shall be submitted within **ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative; and
- h. Upon the written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

7. Alternate Operating scenario

For interchanging the Cedarapids and Minyu primary jaw crushers, the permittee shall submit:

- a. A written notification prior to exchanging the Cedarapids jaw crusher with the Minyu primary jaw crusher. The notification shall identify the reasons for the replacement, the anticipated removal date for the Cedarapids jaw crusher, and the anticipated date of operation for the Minyu jaw crusher.
- b. Written notification within **fifteen (15) days** after removing the Minyu jaw crusher and returning the Cedarapids jaw crusher to service. The notification shall identify the beginning and ending date of operation for the Cedarapids jaw crusher and Minyu jaw crusher, respectively.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

## **Section F. Testing Requirements**

### **1. Annual Performance Testing**

On an annual basis, or other times as determined by the Department of Health, the permittee shall conduct or cause to be conducted performance testing to determine the opacity of fugitive emissions from the rock crushing plant. The Department of Health at any time reserves the right to require source testing of the Minyu primary jaw crusher. The Cedarapids and Minyu primary jaw crushers shall not operate simultaneously during performance testing. The tests shall be conducted for opacity at the crushers, screening operations, and conveyor transfer points. The Department of Health may require testing at other points in the facility or more frequent testing if an inspection indicates poor or insufficient controls.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.675)<sup>1</sup>

### **2. Performance Test Methods**

- a. Performance tests to determine opacity shall be conducted by a certified reader using Method 9 of 40 CFR, Part 60, Appendix A and the procedures of 40 CFR §60.11 with the following additions:
  - i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet) but not more than 402 meters (0.25 miles);
  - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources. The required observer position relative to the sun (Method 9, Section 2.1) shall be followed; and
  - iii. The observer shall record the operating capacity (tons/hr) of the primary crusher at the time the observations were made.

- b. When determining compliance with the fugitive emissions standard specified in Attachment II, Special Condition No. C.6.a. for the crushers, the duration of Method 9 may be reduced from three (3) hours (thirty 6-minute averages) to one (1) hour (ten 6-minute averages) only if the following conditions apply:
  - i. There are no individual readings greater than fifteen (15) percent opacity; and
  - ii. There are no more than three (3) readings of fifteen (15) percent for the 1-hour period.
- c. When determining compliance with the fugitive emissions standard specified in Attachment II, Special Condition No. C.6.b for any transfer point on the belt conveyor(s) or for any other affected facility, the duration of Method 9 may be reduced from three (3) hours (thirty 6-minute averages) to one (1) hour (ten 6-minute averages) only if the following conditions apply:
  - i. There are no individual readings greater than ten (10) percent opacity; and
  - ii. There are no more than three (3) readings of ten (10) percent for the 1-hour period.
- d. When determining compliance with the fugitive emissions standards of Attachment II, Special Condition Nos. C.6.a and C.6.b, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
  - i. Use for the combined emission stream, the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
  - ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.
- e. If, after **thirty (30) days** notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required by Section F, the permittee shall submit a notice to the Department of Health at least **seven (7) days** prior to any rescheduled performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.675)<sup>1</sup>

### 3. Performance Test Expense and Monitoring

The performance tests shall be made at the expense of the permittee and shall be conducted at the maximum expected operating capacity of the rock crushing plant, and may be monitored by the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, SIP §11-60.1-15)<sup>2</sup>

4. Performance Test Plan

**At least thirty (30) days prior** to conducting the performance test, the permittee shall submit a written performance test plan to the Department of Health that includes date(s) of the test, test duration, test locations, test methods, source operation, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR 60.8, SIP §11-60-15)<sup>1,2</sup>

5. Performance Test Report

**Within sixty (60) days after** completion of the performance test, the permittee shall submit to the Department of Health the test report which includes the operating conditions of the facility at the time of the test (e.g., water flow rate for dust suppression, primary crusher closed side setting, etc.), the summarized test results, other pertinent support calculations, and field/laboratory data. The results shall be recorded and reported in accordance with 40 CFR, Part 60, Appendix A and §60.8. The performance test report shall include: the jaw crusher operating rates (tons/hr), jaw crusher closed side setting, locations of where the visible emissions were read, visible emission readings, location of water sprays and enclosures, and normal operating water flow rate (gallons/minute) of the water spray system during the test. The normal operating water flow rate of the water spray system shall be determined by the water flow rate used during the source performance test that demonstrates compliance with the opacity limits of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.675, SIP §11-60-15)<sup>1,2</sup>

6. Deviations

Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department of Health before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

**7. Performance Test Waiver**

Upon written request and justification, the Department of Health may waive the requirement for, or a portion of, a specific annual performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

**Section G. Agency Notification**

1. Any document (including reports) required to be submitted by this covered source permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citation to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specific provision(s) of the SIP.

## PROPOSED

### ATTACHMENT III: ANNUAL FEE REQUIREMENTS COVERED SOURCE PERMIT NO. 0386-02-C

**[Issuance Date]**

**[Expiration Date]**

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1.

1. Annual fees shall be paid in full:
  - a. Within sixty days after the end of each calendar year; and
  - b. Within thirty days after the permanent discontinuance of the covered source.
2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.
3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department of Health.
4. The annual fees and the emission data shall be mailed to:

**Clean Air Branch  
Environmental Management Division  
Hawaii Department of Health  
P.O. Box 3378  
Honolulu, HI 96801-3378**



## PROPOSED

### ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS COVERED SOURCE PERMIT NO. 0386-02-C

**[Issuance Date]**

**[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

1. Complete the attached **Annual Emissions Report Form: Rock Crushing Plant Production**.
2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department of Health within sixty (60) days after the end of each calendar year and shall be mailed to the following address:

**Clean Air Branch  
Environmental Management Division  
Hawaii Department of Health  
P.O. Box 3378  
Honolulu, HI 96801-3378**

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information, including information concerning secret processes or methods of manufacture, by submitting a written request to the Department of Health, and clearly identifying the specific information that is to be accorded confidential treatment.

ATTACHMENT V: COMPLIANCE CERTIFICATION  
COVERED SOURCE PERMIT NO. 0386-02-C  
(PAGE 1 OF 2)

[Issuance Date]

[Expiration Date]

In accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as set by an applicable requirement:

(Make Copies for Future Use)

For Period: \_\_\_\_\_

Date: \_\_\_\_\_

Facility Name: Goodfellow Brothers, Inc.

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (PRINT): \_\_\_\_\_

TITLE: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

Complete the following information for **each** applicable requirement and/or term or condition of the permit that applies to **each** emissions unit at the source. Also include any additional information as required by the director. The compliance certification may reference information contained in a previous compliance certification submittal to the director, provided such referenced information is certified as being current and still applicable.

1. Current permit number: \_\_\_\_\_
2. Emissions Unit No./Description: \_\_\_\_\_
3. Identify the applicable requirement(s), and/or permit term(s) or condition(s) that is/are the basis of this certification:

---

---

---

---

4. Compliance status during the reporting period:

- a. Has the emissions unit been in compliance with the identified applicable requirement(s) and/or permit term(s) or condition(s)?

☐ YES ☐ NO

- b. If YES, was compliance continuous or intermittent?

☐ Continuous ☐ Intermittent

**ATTACHMENT V: COMPLIANCE CERTIFICATION  
COVERED SOURCE PERMIT NO. 0386-02-C  
(CONTINUED, PAGE 2 OF 2)**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as set by an applicable requirement:

c. If NO, explain.

---

---

---

5. The methods used for determining the compliance status of the emissions unit currently and over the reporting period (e.g., monitoring, recordkeeping, reporting, test methods, etc.):

---

---

---

---

---

Provide a detailed description of the methods used to determine compliance: (e.g., monitoring device type and location, test method description, or parameter being recorded, frequency of recordkeeping, etc.)

---

---

---

---

---

6. Statement of Compliance with Enhanced Monitoring and Compliance Certification Requirements.

- a. Is the emissions unit identified in this application in compliance with applicable enhanced monitoring and compliance certification requirements?

☐ YES

☐ NO

- b. If YES, identify those requirements:

---

---

---

---

---

- c. If NO, describe below which requirements are not being met:

---

---

---

---

**PROPOSED**

**ANNUAL EMISSIONS REPORT FORM  
ROCK CRUSHING PLANT PRODUCTION  
COVERED SOURCE PERMIT NO. 0386-02-C**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

**(Make Copies for Additional Use)**

For Reporting Period:\_\_\_\_\_ Date:\_\_\_\_\_

Facility Name:\_\_\_\_\_

Equipment Location:\_\_\_\_\_

Equipment Description.:\_\_\_\_\_

Serial/ID No.:\_\_\_\_\_

**I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.**

Responsible Official (print):\_\_\_\_\_

Title:\_\_\_\_\_

Signature:\_\_\_\_\_

Type of Operation	Material Processed (tons/yr)	Air Pollution Control Measure(s) in use	Control Efficiency (%Reduction)
Truck Unloading			
Primary Crushing (Cedarapids Crusher)			
Primary Crushing (Minyu Crusher)			
Secondary Crushing			
Tertiary Crushing			
Triple Deck Screening (5' x 16')			
Triple Deck Screening (6' x 16')			
Scalping screen (5' x 12')			
Truck Loading			
Conveyors			
Stockpiles			

NOTE: Control measures include water sprays, partial enclosures, screens, housing and duct work to baghouses.

Use the following Control Efficiencies, unless documentation is available to show otherwise:

1. Baghouses: 99%
2. Water sprays, Damp Material, or Shroud: 70%
3. Wet Slurry: 100%

Efficiency factors may be reduced by the Department of Health, if there are any indications that a source's air pollution control device is not operating at the specified efficiency.

**MONITORING REPORT FORM  
OPERATING HOURS AND PRODUCTION - PRIMARY JAW CRUSHERS  
COVERED SOURCE PERMIT NO. 0386-02-C  
(PAGE 1 OF 3)**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

**(Make Copies for Additional Use)**

For Reporting Period:\_\_\_\_\_ Date:\_\_\_\_\_

Facility Name:\_\_\_\_\_

Equipment Location:\_\_\_\_\_

Equipment Description(s):\_\_\_\_\_

Serial No.(Cedarapids Crusher):\_\_\_\_\_Serial No.(Minyu Crusher):\_\_\_\_\_

**I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.**

Responsible Official (print):\_\_\_\_\_

Title:\_\_\_\_\_

Signature:\_\_\_\_\_

1. Report the closed stroke opening, corresponding rated capacity, and production rate for the reporting period:

Month	Cedarapids Primary Jaw Crusher				Minyu Primary Jaw Crusher			
	Closed Stroke Opening (inches)	Hours Operated	Maximum Rated Capacity (ton/hr)	Maximum Production (tons)	Closed Stroke Opening (inches)	Hours Operated	Maximum Rated Capacity (tons/hr)	Maximum Production (tons)
January								
February								
March								
April								

**PROPOSED**

**MONITORING REPORT FORM  
OPERATING HOURS AND PRODUCTION - PRIMARY JAW CRUSHERS  
COVERED SOURCE PERMIT NO. 0386-02-C  
(CONTINUED, PAGE 2 OF 3)**

**[Issuance Date]****[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

Month	Cedarapids Primary Jaw Crusher				Minyu Primary Jaw Crusher			
	Close Stroked Opening (inches)	Hours Operated	Maximum Rated Capacity (tons/hr)	Maximum Production (tons)	Closed Stroke Opening (inches)	Hours Operated	Maximum rated Capacity (tons/hr)	Maximum Production (tons)
May								
June								
July								
August								
September								
October								
November								
December								

**PROPOSED**

**MONITORING REPORT FORM  
OPERATING HOURS AND PRODUCTION - PRIMARY JAW CRUSHERS  
COVERED SOURCE PERMIT NO. 0386-02-C  
(CONTINUED, PAGE 3 OF 3)**

**[Issuance Date]****[Expiration Date]**

In accordance with the HAR, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information semi-annually:

2. Report the total combined operating hours and production on a monthly and 12-month rolling basis for the reporting period:

Month	Total Combined Operating Hours of Minyu and Cedarapids Crushers	Total Combined Operating Hours of Minyu and Cedarapids Crushers on 12-Month Rolling Basis	Total Combined Production of Minyu and Cedarapids Crushers	Total Combined Production of Minyu and Cedarapids Crushers on 12-Month Rolling Basis
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

**Visible Emissions:**

[illegible]



**VISIBLE EMISSIONS FORM REQUIREMENTS  
STATE OF HAWAII**

The following visible emissions (V.E.) form shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with Method 9 or by use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observations shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. observation forms shall be completed as follows:



1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in 5 percent increments (i.e., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. observation form using the symbols as shown.
3. Stand at least fifteen (15) feet, but not more than quarter mile from the fugitive emission points.
4. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each equipment.
5. The six (6) minute average opacity reading shall be calculated for each observation.
6. If possible, the observations shall be performed as follows:
  - a. Read from where the line of sight is at right angles to the wind direction.
  - b. The line of sight shall not include more than one (1) plume at a time.
  - c. Read at the point in the plume with the greatest opacity.
  - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
  - e. The equipment shall be operating at maximum expected capacity.
7. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed V.E. forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health, or their representative upon request.

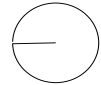
**PROPOSED****VISIBLE EMISSIONS FORM  
STATE OF HAWAII****(Make Copies for Additional Use for Each Equipment)**Permit No.: 0386-02-C

Company Name: \_\_\_\_\_

Equipment: \_\_\_\_\_

Stack **X**  
Sun   
Wind 

Draw North Arrow

**Site Conditions:**

Stack/emission-point height above ground (ft): \_\_\_\_\_

Stack/emission-point distance from observer (ft): \_\_\_\_\_

Emission color (black or white): \_\_\_\_\_

Sky conditions (% cloud cover): \_\_\_\_\_

Wind speed (mph): \_\_\_\_\_

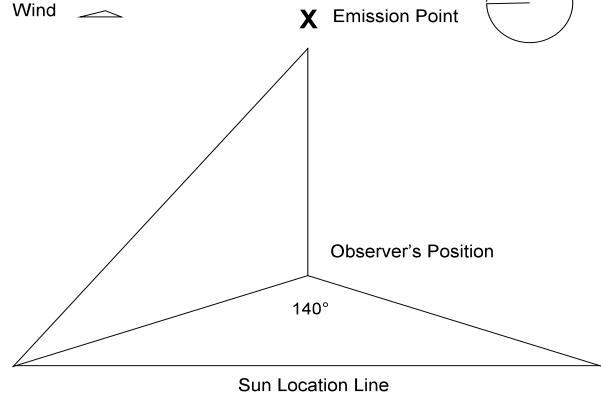
Temperature (°F): \_\_\_\_\_

Observer name: \_\_\_\_\_

Certified? (Yes/No): \_\_\_\_\_

Capacity equipment operated

at: \_\_\_\_\_



Observation Date and Start Time: \_\_\_\_\_

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

Observation Date and Start Time: \_\_\_\_\_

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					